

Applicant : Sandeep Gulati  
Serial No. : 10/677,403  
Filed : October 1, 2003  
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Attorney's Docket No.: 18329-004004

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested. Claim amendments are presented herein to obviate the current rejection.

35 USC § 112

Claims 1-5, 13-19, and 21-26 stand rejected under 35 USC § 112, second paragraph as allegedly failing to particularly point out and distinctly claim the subject matter which the application regards as the invention. The bulk of these objections relate to the inclusion of features for the preconditioning of a digitized output pattern and/or a tessellation of an output pattern. The pre-conditioning and tessellation features are supported in the specification on page 26, line 18 to page 27, line 2:

--Each dot spectrogram provided by the DNA biomicroarray is filtered at step 108 to yield enhanced dot spectrograms .PHI.(kappa.) either by performing a conventional Nucleic Assay Amplification or by applying preconditioning and normalization steps as described in the co-pending patent application having Ser. No. 09/253,789, now U.S. Pat. No. 6,136,541, entitled "Method And Apparatus For Analyzing Hybridized Biochip Patterns Using Resonance Interactions Employing Quantum Expressor Functions". The application is incorporated by reference herein, particularly insofar as the descriptions of the use of preconditioning and normalization curves are concerned.--

Guidance on pre-conditioning and using tessellation can be found in a variety of passages within the '541 patent including, inter alia, col. 7, lines 34-49; col. 8, lines 2-11; col. 8, line 61 to col. 9, line 12 (section entitled "Preconditioner Transforms"); col. 18, line 56 to col. 20, line 27 (section entitled "Preconditioning of the Dot Spectrogram"); and FIG. 5. Accordingly, it is respectfully submitted that a skilled artisan could readily practice the recited subject matter as the specification contains adequate support for the terms preconditioning and tessellation.

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Claim 1 has been amended to recite a preconditioning unit that modifies the digitized output pattern so that a scale of the digitized output pattern is compatible with a scale of a reference wave. Claim 13 recites similar features. Based on these amendments, the skilled artisan would clearly understand what is achieved by the preconditioning unit as recited in the claims, namely the scaling of the output pattern.

In order to expedite the allowance of the current application, claim 2 has been amended to recite "interferometric signal processing means" and a "tessellation unit" (to obviate the issue relating to a means-plus-function limitation potentially covering subject matter incorporated by reference). Therefore, it is respectfully requested that the rejection of claim 2 under 35 USC § 112, first paragraph be withdrawn.

The term "diffusion curve" has been swapped with the term "reference scale" which refers to any plot in some claims and "viral diffusion curve" as recited in the specification in other claims.

Claim 1 has been amended to recite: an interferometric unit configured to generate a plurality of resonances an interference between the pre-conditioned digitized output pattern and the reference wave adapted for the array to enhance the digitized output pattern, the resonances identifying data indicative of the biological indicator within the patient sample. Similar clarifications were made to claim 13. Such amendments clarify that the interferometric unit generates resonances between the pre-conditioned digitized output pattern and the reference wave which indicate whether data indicative of the biological indicator within the biological sample. Moreover, the reference wave has been clarified that it is adapted to the array.

Accordingly, all of the claims should be allowable.

#### Concluding Comments

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending

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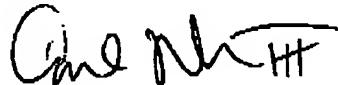
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claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Kindly change the Attorney Docket Number for this matter to: 18329-004004.

Applicant asks that all claims be allowed. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,



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Carl A. Kukkonen, III  
Reg. No. 42,773

Fish & Richardson P.C.  
12390 El Camino Real  
San Diego, California 92130  
Telephone: (858) 678-5070  
Facsimile: (858) 678-5099

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